SENATE TAXATION
EXHIBIT NO. 7
DATE 1-30-2013
BILL NO. SB157

Pros and Cons of Different Imagery Options for Property Valuation:

Option	Pros	Cons
Option A - Oblique Imagery **Resolution--Cost:** **3" urban--$472/sqmi** **9" rural--$85.50/sqmi** **Total--$5,068,665**	Oblique imagery allows for high quality/high efficiency imagery analysis Accurate vertical and horizontal measurements Allow for determination of structure type (house vs outbuilding vs garage vs commercial) Proven implementations in appraisal jurisdiction nationwide Existing integration with ORION CAMA system Tightly controlled imagery acquisition schedule High resolution available Automated change detection available Tight integration with ESRI software Online imagery and imagery analysis tools available	Cost Data administration Unknown efficiency gains No ortho (top down) technology available
Option B - Oblique Imagery **Resolution--Cost** **6" urban-$200/sqmi** **12" rural--$95/sqmi** **Total--$5,289,885**	Same as above except as noted in Cons Ortho (top down) technology available	Same as above except as noted in Pros No tight integration with ESRI software No off-the-shelf integration with ORION
Option C - Ortho Imagery **6" urban--$140/sqmi** **12" rural--$50/sqmi** **Total--$2,852,640**	Less expensive then oblique Proven implementations in appraisal jurisdiction nationwide	No vertical measurements possible Difficult to determine structure type (residential, outbuilding, commercial) No off-the-shelf integration with ORION
Option D - Satellite Imagery **Resolution:** **18" to ##"** **(all satellite)** **Total--$in progress**	Cheaper then oblique and ortho imagery Statewide imagery available Online imagery and imagery analysis tools available Controlled aquistion schedule would allow comparision to find change in future collections	Low resolution (i.e. difficult to interpret imagery) Less control over imagery acquisition Cloud cover 20% or less Difficult to determine structure type (residential, outbuilding, commercial) Limited widespread us in residential appraisal functions in jurisdiction in US (still researching) No automated change detection software/process so requires manual change detection discovery No vertical measurements possible. Horizontal measurements marginal due to low resolution No off-the-shelf integration with ORION
Option E - Satellite Imagery **Resolution:** **12" to 18""** **(mixture of aerial and satellite)** **Total--$70,000**	Cheaper then oblique and ortho imagery Statewide imagery mostly available Online imagery and imagery analysis tools available	Low resolution (i.e. difficult to interpret imagery) Little control over imagery collection schedule making change discovery difficult Cloud cover 20% or less Difficult to determine structure type (residential, outbuilding, commercial) Limited widespread us in residential appraisal functions in jurisdiction in US (still researching) No automated change detection software/process so requires manual change detection discovery No vertical measurements possible. Horizontal measurements marginal due to low resolution No off-the-shelf integration with ORION
Option F - NAIP Imagery **Resolution:** **1 meter** **Total--$ free**	Free Washington DC *plans* to collect NAIP nationwide every 2 years Used by PAD for years in ag/forest valuation, some residential appraisal Statewide coverage	Low resolution (i.e. difficult to interpret imagery) Difficult to determine structure type (residential, outbuilding, commercial) No automated change detection software/process so requires manual change detection discovery No vertical measurements possible. Horizontal measurements marginal due to low resolution No known use in residential appraisal functions in any jurisdiction in US (still researching)